Modeling Quarterly Review Meeting

Watershed Modeling

November 3, 2015

CBPO Conference Room - The Fishshack
410 Severn Avenue Annapolis, MD 21403

For Remote Access:

Adobe Connect: https://epa.connectsolutions.com/modeling/ (enter as guest)
Conference Bridge: (866)-299-3188 code 267-985-6222#
Event webpage: http://www.chesapeakebay.net/calendar/event/22984/

10:00 Announcements and Amendments to the Agenda – Dave Montali, WVDEP-Lee Currey, MDE

10:05 Review of Modeling Workgroup Priorities – Lee Currey, MDE - Dave Montali, WVDEP
The quarterly review of the Modeling Workgroup priorities with associated timelines will be discussed.

10:15 Phase 6 Watershed Model Schedule Update – Gary Shenk, EPA-CBP
Gary will present further updates of the development schedule with key links to the 2017 Midpoint Assessment schedule.

10:25 Phase 6 Reservoir Simulation Progress – Gopal Bhatt, PSU
Progress in development of the Phase 6 prototype model will be described with emphasis on the wide range of reservoir refinements underway including those brought through estimated SPARROW impoundment effects, new P6 refined reservoirs, and planned refinements of the Conowingo and Lower Susquehanna reservoirs.

11:00 Developing Information for Phase 6 Conowingo Calibration – Bruce Michael, MDDNR
Bruce will review the information and data being developed through the Exelon supported research and monitoring program. The data available by the close of December for application in WSM and WQSTM application will be described

11:25 A Multiple Model Approach to Conowingo Simulation – Jim Fitzpatrick, HDR HydroQual
The development of a separate model of the Conowingo pool that could be swapped for the HSPF simulation will be proposed. Either the direct integration approach, or an approach to develop multiple lines of evidence from a stand-alone model that would be reflective of the other documented lines of evidence of scour

and deposition in the Conowingo are decisions that would need to put before the partnership.

12:00 LUNCH

1:00 Phase 6 Septic System Loads – Vic D'Amato, Tetra Tech
A refinement of estimated septic system nutrient loads that reach low order Chesapeake watershed streams will be described.

1:20 Refined Location of Septic Systems in the CB Watershed – Peter Claggett, USGS
Peter will describe a refined spatial assessment of septic systems that he has developed along with an accounting for rapid infiltration other land applied point source loads

1:45 Update on Phase 6 Inputs - Matt Johnson, U. Maryland
Matt will re4port on the tsunami of 30 years of Phase 6 input data. The Phase 6 input loads relative to Phase 5 will be presented.

2:00 Assessment of Bank and Flood Plain Nutrient and Sediment Loads – Greg Noe and Peter Claggett, USGS
Progress in the assessment of bank and flood plain nutrient and sediment loads will be described with an eye toward application in the Phase 6.

2:30 ADJOURN

Modeling Quarterly Review Meeting

Estuarine/Ecosystem Modeling

November 4, 2015

CBPO Conference Room - The Fishshack
410 Severn Avenue Annapolis, MD 21403

For Remote Access:

Adobe Connect: https://epa.connectsolutions.com/modeling/ (enter as guest)
Conference Bridge: (866)-299-3188 code 410-267-5731#
Event webpage: http://www.chesapeakebay.net/calendar/event/22984/

10:00 Announcements and Amendments to the Agenda – Lee Currey, MDE - Dave Montali, WVDEP

10:05 WQSTM Calibration Status – Carl Cerco, U.S. CoE ERDC
The Water Quality and Sediment Transport Model (WQSTM) calibration to the August 2015 Phase 6 Model loads will be examined. Initial estimates of tidal marsh attenuation of nitrogen, phosphorus and sediment will be discussed as well as the initial estimated loss of attenuation through tidal wetland loss through sea level rise. Progress in developing an improved representation of shallow water in the Water Quality and Sediment Transport Model (WQSTM) will also be presented.

11:35 Conowingo Infill Studies – Jeff Cornwell, Jeremy Testa, and Larry Sanford – UMCES
An update on the two-year research and monitoring program will be provided and a description of how the information provided by this research and monitoring program could be simulated by the WQSTM will be provided by the PIs and Carl Cerco.

12:30 LUNCH

1:30 Phase 6 Lag Time Simulation Progress – Gopal Bhatt, PSU
Progress in development lag times for nutrient species other than groundwater nitrate will be described.

2:00 Progress in Simulating Lag Times with rSAS – Ciaran Harmon, JHU
The application of rSAS to simulate groundwater nitrate lag times will be presented.

2:30 Analysis of Lag Times in the Potomac Watershed – Ward Sanford, USGS
Progress in development of the Phase 6 prototype model will be described with emphasis on reservoir refinements underway.

3:00 **Chester River Shallow Water Multiple Models – Richard Tian, UMCES**
Richard will describe the application of FVCOM, an unstructured grid model, in the Chester River shallow water work and provide an initial look at the water quality calibration.

3:30 **ADJOURN**